



## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2021-0265; Project Identifier MCAI-2020-01541-R;

Amendment 39-21603; AD 2021-12-16]

RIN 2120-AA64

**Airworthiness Directives; Airbus Helicopters Deutschland GmbH (AHD)**

**Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for Airbus Helicopters Deutschland GmbH (AHD) Model MBB-BK117 C-2 and MBB-BK117 D-2 helicopters. This AD was prompted by a report of increased control force in the collective axis. This AD requires repetitive visual inspections of the main rotor actuator (MRA), as specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For material incorporated by reference (IBR) in this AD, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu); Internet [www.easa.europa.eu](http://www.easa.europa.eu). You may find this material on the EASA website at <https://ad.easa.europa.eu>. You may view this material at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material

at the FAA, call (817) 222-5110. It is also available in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0265.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0265; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Katherine Venegas, Aviation Safety Engineer, Los Angeles ACO Branch, FAA, 3960 Paramount Blvd., Lakewood, California 90712; telephone (562) 627-5353; email [katherine.venegas@faa.gov](mailto:katherine.venegas@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Background**

The EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2018-0283, dated December 20, 2018 (EASA AD 2018-0283), to correct an unsafe condition for AHD Model MBB-BK117 C-2 and MBB-BK117 D-2 helicopters. EASA later issued EASA AD 2020-0257, dated November 17, 2020 (EASA AD 2020-0257), to supersede EASA AD 2018-0283.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to AHD Model MBB-BK117 C-2 and MBB-BK117 D-2 helicopters. The NPRM published in the *Federal Register* on April 8, 2021 (86 FR 18221). The NPRM was prompted by a report of increased control force in the collective axis on an AHD Model EC135 helicopter. Subsequent inspections determined that a nut on a piston of the MRA had cracked and separated from the piston rod. Due to design similarity, Model MBB-BK117 C-2 and MBB-BK117 D-2 helicopters are also affected by this unsafe condition. The NPRM proposed to require repetitive visual inspections of the MRA as specified in EASA AD 2020-0257.

The FAA is issuing this AD to prevent failure of the MRA and subsequent loss of control of the helicopter. See the EASA AD for additional background information.

### **Discussion of Final Airworthiness Directive**

#### **Comments**

The FAA gave the public the opportunity to participate in developing this final rule. The FAA received no comments on the NPRM or on the determination of the cost to the public.

#### **Conclusion**

The FAA reviewed the relevant data and determined that air safety and the public interest require adopting this final rule as proposed, except the compliance time for the reporting requirement has changed from within 30 days after the effective date of this AD to within 30 days after accomplishing each inspection and determining that there is a crack, damage, black coloration, or corrosion. The FAA has determined that this change:

- Is consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Does not add any additional burden upon the public than was already proposed in the NPRM.

The FAA also determined that this change will not increase the economic burden on any operator or increase the scope of this final rule.

#### **Related Service Information Under 1 CFR Part 51**

EASA AD 2020-0257 specifies procedures for a repetitive visual inspection of the MRA and depending on the results, replacing the affected parts.

This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

#### **Differences Between this AD and the EASA AD**

The EASA AD requires contacting Airbus Helicopters or replacing an affected part, whereas this AD requires performing the corrective action in accordance with FAA-approved procedures or removing the affected parts from service instead. The service information referenced in the EASA AD refers to calendar time when specifying the

compliance time for the inspections, whereas this AD uses hours time-in-service. The EASA AD allows a tolerance to the compliance times, whereas this AD does not. The EASA AD does not specify a compliance time for the reporting requirements; whereas this AD requires performing the reporting action within 30 days after accomplishing each inspection and determining that there is a crack, damage, black coloration, or corrosion.

### **Interim Action**

The FAA considers this AD interim action. If final action is later identified, the FAA might consider further rulemaking then.

### **Costs of Compliance**

The FAA estimates that this AD affects 216 helicopters of U.S. Registry. Labor rates are estimated at \$85 per work-hour. Based on these numbers, the FAA estimates that operators may incur the following costs in order to comply with this AD.

Inspecting the nuts on the MRA pistons takes about 1 work-hour for an estimated cost of \$85 per helicopter and \$18,360 for the U.S. fleet, per inspection cycle.

Replacing the MRA takes about 7 work-hours and parts cost about \$286,554 for an estimated cost of \$287,149 per helicopter.

Repairing the MRA takes up to about 8 work-hours and parts cost about \$110 for an estimated cost of up to \$790 per MRA.

If required, reporting information takes about 1 work-hour for an estimated cost of \$85 per instance.

### **Paperwork Reduction Act**

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB control number. The control number for the collection of information required by this AD is 2120-0056. The paperwork cost associated with this AD has been detailed in the Costs of Compliance section of this document and includes time for reviewing instructions, as well as completing and reviewing the collection of information. Therefore, all reporting associated with this AD is mandatory. Comments concerning the accuracy of this burden

and suggestions for reducing the burden should be directed to Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Pkwy., Fort Worth, TX 76177-1524.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **The Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

## **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

**2021-12-16 Airbus Helicopters Deutschland GmbH (AHD):** Amendment 39-21603;

Docket No. FAA-2021-0265; Project Identifier MCAI-2020-01541-R.

#### **(a) Effective Date**

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to all Airbus Helicopters Deutschland GmbH (AHD) Model MBB-BK117 C-2 and MBB-BK117 D-2 helicopters, certificated in any category.

#### **(d) Subject**

Joint Aircraft System Component (JASC) Code: 6710, Main Rotor Control.

#### **(e) Reason**

This AD was prompted by a report of increased control force in the collective axis. The FAA is issuing this AD to prevent failure of the main rotor actuator and subsequent loss of control of the helicopter.

#### **(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

#### **(g) Requirements**

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, European Union Aviation Safety Agency (EASA) AD 2020-0257, dated November 17, 2020 (EASA AD 2020-0257).

**(h) Exceptions to EASA AD 2020-0257**

(1) Where EASA AD 2020-0257 refers to its effective date, this AD requires using the effective date of this AD.

(2) Where Note 1 of EASA AD 2020-0257 specifies a tolerance of 3 months may be applied to the initial threshold and to the repetitive inspection interval, this AD does not allow this tolerance.

(3) Where paragraph (2) of EASA AD 2020-0257 specifies contacting Airbus Helicopters, this AD requires performing the corrective action in accordance with FAA-approved procedures.

(4) Where paragraph (3) of EASA AD 2020-0257 specifies an alternative method to comply with the requirements of paragraph (2) of EASA AD 2020-0257 by replacing an affected part, this AD requires removing an affected part from service as an alternative method.

(5) Where paragraph (1) of EASA AD 2020-0257 specifies a compliance time for the initial inspection of “before an affected part exceeds 12 months since new, or since last overhaul, or within 3 months after the effective date of this AD, whichever occurs later” and repetitive inspections at intervals not to exceed 12 months, this AD requires a compliance time for the initial inspection of before an affected part exceeds 319 total hours time-in-service (TIS), or within 319 hours TIS after the date of the last overhaul, or within 80 hours TIS after the effective date of this AD, whichever occurs later, and repetitive inspections at intervals not to exceed 319 hours TIS.

(6) Although the service information referenced in EASA AD 2020-0257 does not specify a compliance time for the reporting requirement, this AD requires the reporting action to be performed within 30 days after accomplishing each inspection and determining that there is a crack, damage, black coloration, or corrosion.

(7) The “Remarks” section of EASA AD 2020-0257 does not apply to this AD.

**(i) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local

Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(j) Related Information**

For more information about this AD, contact Katherine Venegas, Aviation Safety Engineer, Los Angeles ACO Branch, FAA, 3960 Paramount Blvd., Lakewood, California 90712; telephone (562) 627-5353; email katherine.venegas@faa.gov.

**(k) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) European Union Aviation Safety Agency (EASA) AD 2020-0257, dated November 17, 2020.

(ii) [Reserved]

(3) For EASA AD 2020-0257, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find this EASA AD on the EASA website at <https://ad.easa.europa.eu>.

(4) You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110. This material may be found in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0265.

(5) You may view this material that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email [fedreg.legal@nara.gov](mailto:fedreg.legal@nara.gov), or go to <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.  
Issued on June 4, 2021.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

[FR Doc. 2021-13710 Filed: 6/28/2021 8:45 am; Publication Date: 6/29/2021]